

IN THE CLAIMS:

1. (Currently Amended) A method for polishing a wafer comprising the steps of:
holding a wafer on a rotatable wafer holding plate;
providing a rotatable table;
adhering a polishing cloth to said rotatable table;

5 supplying a polishing agent containing an alkaline solution to said polishing cloth, said alkaline solution containing an organic base or a salt thereof and silica having essentially spherical particles, wherein the organic base or said salt is tetramethyl ammonium hydroxide, said tetramethyl ammonium hydroxide being used in a range from greater than 10 wt % to less than or equal to 20 wt %;

10 polishing a surface of said wafer with said polishing cloth by placing said polishing cloth with said polishing agent in contact with said surface of said wafer;

controlling pH of said polishing agent in a pH value range level from 10 to 13, wherein Na_2CO_3 is used for pH adjustment of said alkaline solution.

2. (Currently Amended) A method for polishing a wafer comprising the steps of:
holding a wafer on a rotatable wafer holding plate; and

polishing a surface of the wafer being in contact with a polishing cloth adhered on a rotatable table in such a state that a polishing agent is supplied onto the polishing cloth, wherein
5 the polishing agent is an alkaline solution which contains silica, said silica being essentially uniformly dispersed in said alkaline solution, the silica having particles each essentially in the

shape of a sphere and an average particle diameter of 5 to 10 nm, said polishing agent being an alkaline solution which contains an organic base or a salt thereof, wherein the organic base or said salt is tetramethyl ammonium hydroxide, said tetramethyl ammonium hydroxide being in a range of greater than 10 wt % to less than or equal to 20 wt %.

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3 - 9. (Canceled)

10. (Previously Presented) The method for polishing a wafer according to claim 1, wherein amount of the organic base or the salt thereof does not exceed a dissolution limit of the polishing agent in use.

11. (Previously Presented) The method for polishing a wafer according to claim 1, wherein the wafer is a silicon wafer.

12 - 14. (Canceled)

15. (Previously Presented) The method for polishing a wafer according to claim 1, wherein the polishing cloth is of an unwoven cloth type.

16. (Previously Presented) The method for polishing a wafer according to claim 1, wherein Asker C hardness of the polishing cloth is 50 or more.

17. (Previously Presented) The method for polishing a wafer according to claim 1, wherein stock removal of the wafer is 1 μm or more.

18. (Currently Amended) A method for polishing a wafer comprising the steps of:

holding a wafer on a rotatable wafer holding plate;

providing a rotatable table;

connecting a polishing cloth to said rotatable table;

5 supplying a polishing agent containing an alkaline solution to said polishing cloth, said alkaline solution containing an organic base or a salt thereof and silica having essentially spherical particles, said organic base being a quaternary ammonium hydroxide;

providing a water supply line;

providing an additive supply line;

10 providing a starting slurry supply line;

providing a slurry holding tank, said being connected to said water supply line, said additive supply line and said slurry supply line;

mixing water delivered via said water supply line, one or more additives delivered via said additive supply line and a starting slurry delivered via said starting slurry supply line to form a slurry mixture;

15 storing said slurry mixture in said slurry holding tank;

providing a means for holding said polishing agent located adjacent to said slurry holding tank, said holding means being connected to said slurry holding tank via a slurry

mixture supply line;

20 polishing a surface of said wafer with said polishing cloth by placing said polishing cloth
in contact with said surface of said wafer;

collecting excess polishing agent after polishing said wafer with said polishing agent;

supplying said excess polishing agent to said means for holding said polishing agent, said
excess polishing agent mixing with existing polishing agent contained in said holding means to
25 ~~form a polishing agent mixture;~~

adding said slurry mixture to said excess polishing agent and said existing polishing
agent contained in said holding means via said slurry mixture supply line to form a polishing
agent mixture;

adjusting pH level of said polishing agent mixture in a pH value range from 10 to 13,
30 wherein Na_2CO_3 is used for pH adjustment of said alkaline solution; and
supplying said polishing agent mixture to said polishing cloth.

19. (Currently Amended) The method for polishing a wafer according to claim 18,
wherein the silica is used at a concentration in the range of from ~~[[5]]~~ 10 to ~~[[80]]~~ 70 wt % of
silica.

20. (Previously Presented) The method for polishing a wafer according to claim 18,
wherein the polishing cloth is of an unwoven cloth type.

21. (Currently Amended) The method for polishing a wafer according to claim 20, wherein the silica is used at a concentration in the range of from ~~[[5]]~~ 10 to ~~[[80]]~~ 70 wt % of silica.

22. (Previously Presented) The method for polishing a wafer according to claim 18, wherein hardness (Asker C hardness) of the polishing cloth is 50 or more.

23. (Previously Presented) The method for polishing a wafer according to claim 18, wherein amount of the organic base or the salt thereof does not exceed a dissolution limit of the polishing agent in use.

24. (Canceled)

25. (New) The method for polishing a wafer according to claim 18, further comprising the step of:

providing a collecting tank, said collecting tank being located adjacent to said rotatable table, collecting tank receiving said excess polishing agent, said collecting tank having a drainage port;

providing an excess polishing agent supply line, said excess polishing agent supply line being connected to said drainage port of said collecting tank and said holding means;

providing a pump connected to said excess polishing agent supply line;

delivering said excess polishing agent from said collecting tank through said excess polishing agent supply line to said holding means via said pump.

26. (New) The method for polishing a wafer according to claim 18, wherein the silica is used at a concentration in the range of from 10 to 20 wt % of silica.

27. (New) The method for polishing a wafer according to claim 2, further comprising the steps of:

controlling pH of said polishing agent in a pH value range level from 12 to 13, wherein Na_2CO_3 is used for pH adjustment of said alkaline solution.